



POLIOMYELITIS SURVEILLANCE REPORT

FOR ADMINISTRATIVE USE

REPORT NO. 238

SEPTEMBER 15, 1961

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SPECIAL NOTE

This report is intended for the information and administrative use of those involved in the investigation and control of poliomyelitis and polio-like diseases. It presents a summary of provisional information reported to CDC from State Health Departments, Virology Laboratories, Epidemic Intelligence Service Officers, and other pertinent sources. Since much of the information is preliminary in nature, confirmation and final interpretation should be determined in consultation with the original investigators prior to any further use of the material.

SUMMARY

Reports of poliomyelitis remained at the unseasonable low noted last week. The 36th week of the year ending September 9, brought news of 62 cases.

Cases continue to occur in the Syracuse, New York area. Pennsylvania reported seven cases but noted no concentration.

Recent Coxsackie isolations made in epidemics of febrile disease and aseptic meningitis are reported in Section 5.

Increased poliomyelitis has been reported from several neighboring countries to the South. These figures will be presented in Section 6.

1. CURRENT POLIOMYELITIS MORBIDITY TRENDS

The reported total of cases of poliomyelitis for the 36th week remained at the level reported last week. A total of 62 cases, 37 paralytic, was included in telegraphic reports. The previous week's total was 60 cases with 36 paralytic.

Case totals cumulated weekly through the 36th week for this year and the preceding four years are shown below. Paralytic cases reported this year represent only 38% of similar cases in 1960, the low of recent years.

Polio (Cumulated Weekly) through 36th Week for Past Five Years

	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>
Paralytic	454	1200	3122	1262	1305
Total	685	1735	4956	2597	4162

Only two States, New York and Pennsylvania, reported over three cases. Aside from continuing cases in upper New York State, there have been no epidemic concentrations noted.

2. REPORTS

A. New York State

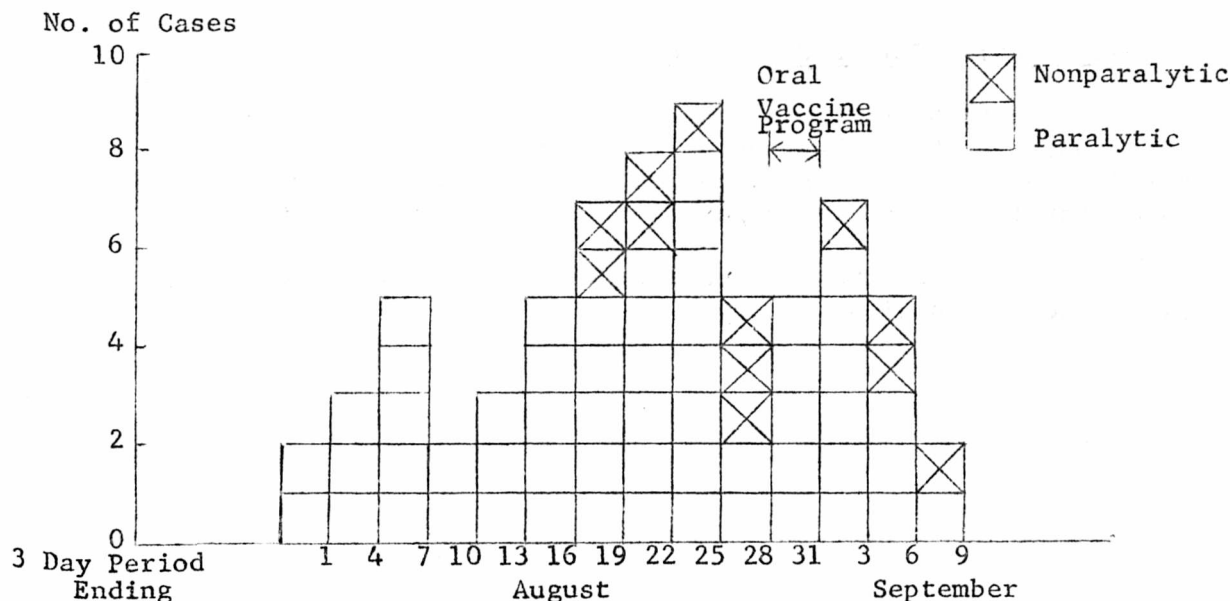
Dr. Robert M. Albrecht, Director, Office of Epidemiology, New York State Department of Health, reports that 15 additional paralytic cases of poliomyelitis have been recognized during the past week in Onondaga, Madison, and Oneida Counties. Through Wednesday, September 13, 60 cases of paralytic poliomyelitis have occurred in this tri-county area. Of these cases, 34 have occurred in Onondaga County (22 in Syracuse), 15 in Madison County, and 11 in Oneida County. Type I poliovirus has been isolated from seven of these cases.

The 60 paralytic cases are shown below by week of onset and by county. Cases continue to occur in Onondaga County while the last case to occur in either Madison or Oneida County was on September 1.

<u>County</u>	<u>Before July</u>	<u>7/29</u>	<u>8/5</u>	<u>8/12</u>	<u>8/19</u>	<u>8/26</u>	<u>9/2</u>	<u>9/9</u>
Onondaga	1	1	2	1	4	10	11	4
Madison	1	0	4	3	5	2	0	0
Oneida	<u>1</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>0</u>
TOTAL	3	1	8	6	11	15	12	4

The tri-county area was the scene of an intensive immunization program from August 29-31. Over 400,000 doses of type I oral polio-vaccine were fed during this period. The total population of the three counties is 742,000. The epidemic curve shown below depicts the outbreak by date of onset in three-day intervals. The three days in which the oral vaccine was administered are marked. The histogram includes the 56 paralytic and 12 nonparalytic cases occurring since August 1.

POLIOMYELITIS BY DATE OF ONSET
ONONDAGA-MADISON-ONEIDA
COUNTIES, NEW YORK



Fifteen paralytic cases have had onset since the oral immunization program began. All but one of the 15 cases are from Onondaga County. Of the 15 cases, 11 received oral vaccine as shown below:

<u>No</u> <u>Vaccine</u>	<u>Interval in Days Between Oral Vaccine and Onset of Symptoms</u>							
	<u>Same Day</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
4	2	0	2	3	1	1	1	1

In addition to the 60 paralytic cases, there are six nonparalytic cases in Onondaga County, five in Oneida County and one in Madison County. There have been two deaths. The age and vaccination history of the 60 paralytic cases are shown in the following table:

<u>Age</u> <u>Group</u>	<u>Vaccination History</u>					<u>TOTAL</u>	<u>%</u>
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4+</u>		
0-4	11	2	4	8	4	29	48.3
5-9	1	0	3	4	3	11	18.3
10-19	2	0	2	1	2	7	11.7
20-29	3	1	0	2	1	7	11.7
30-39	5	0	0	1	0	6	10.0
TOTAL	22	3	9	16	10	60	100.0

B. Pennsylvania

The seven cases of poliomyelitis reported this week include four widely scattered paralytic cases. According to Dr. I. F. Gratch, Epidemiologist, Pennsylvania State Department of Health, one of the paralytic cases was an unvaccinated 41 year-old white female from Dauphin County who had onset of paralytic disease on August 18 and died on August 27. This patient had not participated in the mass immunization program carried out earlier this year in Dauphin County. The corrected Pennsylvania State total now stands at 23 cases.

3. 1961 POLIOMYELITIS CASES REPORTED TO PSU

Through September 9, there have been 474 cases of poliomyelitis with onset in 1961 submitted on individual case forms to the Poliomyelitis Surveillance Unit. Of these 474 cases, 366 are paralytic, 94 nonparalytic, and 14 unspecified as to paralytic status.

These cases are presented in Table 3 by paralytic status, age group and vaccination history.

TABLE 3
POLIOMYELITIS CASES BY PARALYTIC STATUS, AGE GROUP
AND VACCINATION STATUS REPORTED ON PSU FORMS
(Through September 9, 1961)

Age Group	Paralytic						Total
	Boses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	94	15	15	15	15	7	161
5-9	25	6	5	17	18	3	74
10-14	16	1	4	11	13	2	47
15-19	6	0	5	4	3	1	19
20-29	19	0	3	4	2	1	29
30-39	15	3	1	0	2	2	23
40+	11	0	0	0	0	2	13
TOTAL	186	25	33	51	53	18	366

PERCENT

DOSES 53.4 7.2 9.5 14.7 15.2 - 100.0

Age Group	Nonparalytic						Total
	Doses of Vaccine						
	0	1	2	3	4+	Unk	
0-4	11	0	5	6	1	1	24
5-9	4	0	1	7	7	3	22
10-14	0	2	3	5	6	1	17
15-19	1	0	2	2	3	0	8
20-29	5	0	1	5	2	2	15
30-39	4	0	0	2	0	0	6
40+	0	0	0	0	2	0	2
TOTAL	25	2	12	27	21	7	94

PERCENT

DOSES 28.7 2.3 13.8 31.0 24.1 - 100.0

4. ROUTINE POLIOMYELITIS SURVEILLANCE

A. Cases with Onset within 30 Days of Vaccination

No additional cases of poliomyelitis within thirty days of vaccination have been reported to the Poliomyelitis Surveillance Unit during the past week ending September 9. Thus, the 1961 total remains at nine cases, of which seven are paralytic (one correlated).

5. ENTEROVIRUS SURVEILLANCE

Notification of a number of Coxsackie B-4 isolates in New Haven and surrounding areas has been received from Dr. G. D. Hsiung, Director, Virus Diagnostic Laboratory, Yale University School of Medicine. Fourteen isolates have been obtained since May. The clinical features of those infected, varied from inapparent infection in one family contact to bronchiolitis, pneumonia, pericarditis, myalgia, aseptic meningitis, and encephalitis in hospitalized patients. One patient exhibited herpangina and gastroenteritis. The majority of the 13 patients hospitalized since May were infants and preschool age children. Aside from a cluster of four cases in one family, there is no evidence of concentrations within New Haven.

An outbreak of aseptic meningitis in North Dakota is also under investigation. Mr. Kenneth Mosser, Director of Preventable Disease Division, North Dakota State Department of Health, reports that four foci have been recognized: Bismarck (three cases), Garrison (12 cases), Minot (six cases), and Dickenson (four cases). The clinical features of these 25 cases included fever, malaise, nausea, headache, myalgia, and stiff neck. No exanthem or pleurodynia has been evident, but several instances of minor febrile illness in family contacts have been noted. The majority of cases occurred in preschool and school age children. Laboratory studies carried out by the CDC Kansas City Virology Laboratory, under the direction of Dr. Tom Chin, have yielded Coxsackie B-5 isolates in several cases. This same Coxsackie type has been obtained from several cases of aseptic meningitis in Fort Dodge, Iowa, and from one case of pleurodynia in Des Moines, Iowa.

6. POLIO IN THE HEMISPHERE

With the marked decrease in reported poliomyelitis in the United States, it is of interest to note poliomyelitis trends for various other countries in this Hemisphere which are north of the equator.

Reported Poliomyelitis Cumulated Through the 34th Week

	<u>1961</u>	<u>1960</u>
Colombia	108	99
Costa Rica	6*	32
Cuba	215	102
El Salvador	3	7
Guatemala	131	28*
Honduras	23	15
Mexico	245	414
Nicaragua	13	189
Panama	20	20
Venezuela	97	225

* Partial

(Data from Pan American Sanitary Bureau, Report #35, Vol. XXXIII)

Five of the ten countries show a lower incidence this year, while two others show the same or only a minimal increase in reported cases. Cuba, Guatemala and Honduras show a higher incidence during the first 34 weeks.

Total cases reported during the past four years from five of these countries are presented below as reported in the World Health Organization's Epidemiological and Vital Statistics Report, Vol. 14, Number 3, Pages 92 and 93, with the 1960 totals for Cuba and Mexico kindly supplied by Dr. Puffer of the Pan American Sanitary Bureau. Experience during recent years in these countries shows a biennial increase in reported cases, with the exception of Cuba, which shows a steady increase in cases reported since 1957.

	<u>TOTAL CASES</u>			
	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>
Cuba	328	288	103	97
Costa Rica	66	41	63	51
Guatemala	78	155	85	107
Mexico	1087	1835	904	1562
Nicaragua	211	16	255	68

(This surveillance report was prepared by the Poliomyelitis and Polio-like Diseases Surveillance Unit, Michael J. Regan, M.D., Chief, James A. Bryan, II, M.D., and Mr. Leo Morris, Statistician, with the assistance of Statistics Section, CDC.)

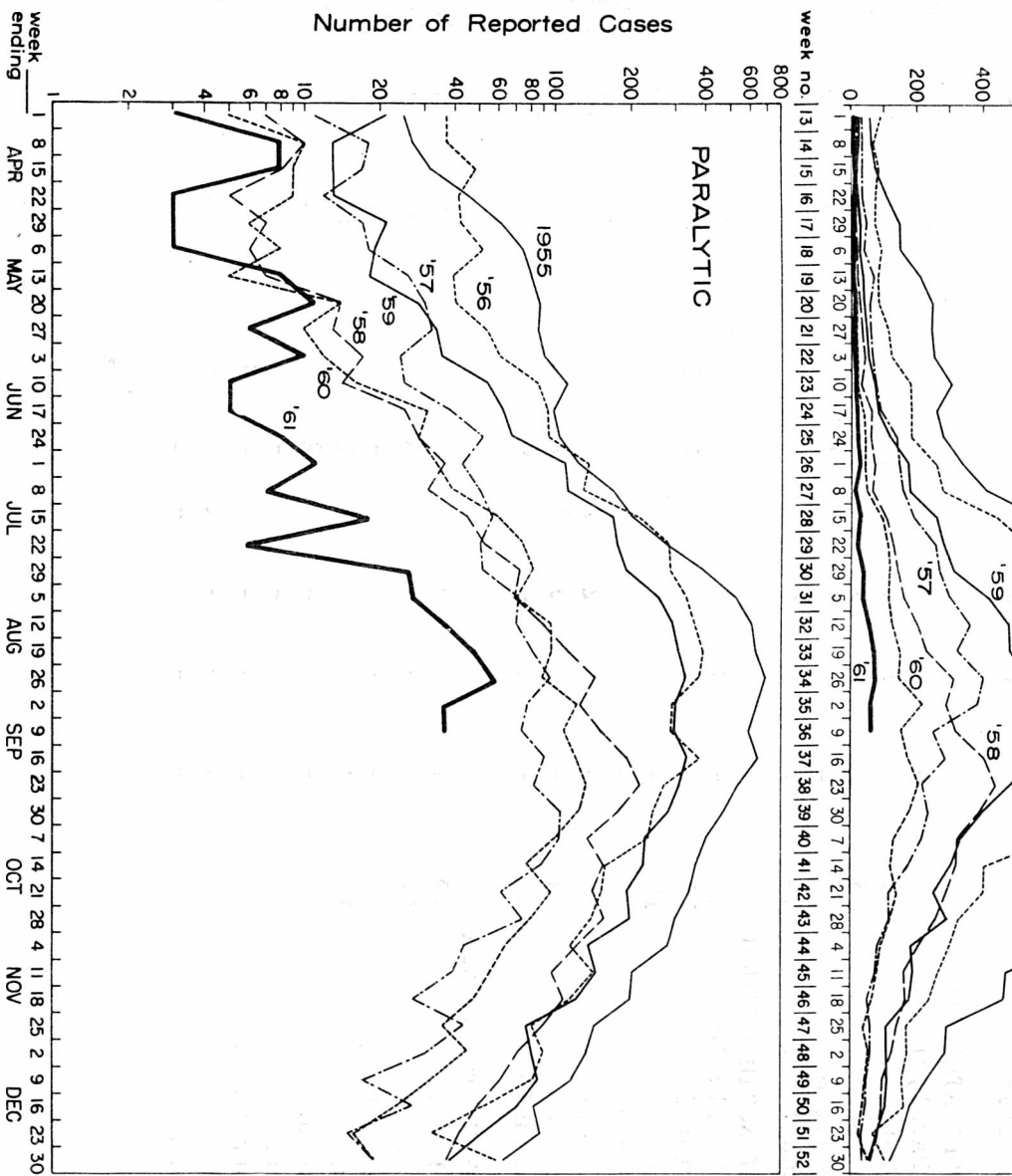


FIGURE 1

**CURRENT U.S. POLIO INCIDENCE
COMPARED WITH YEARS 1955-1960, April - December, by week**

PROVISIONAL DATA SUPPLIED BY NATIONAL OFFICE OF VITAL STATISTICS
AND COMMUNICABLE DISEASE CENTER

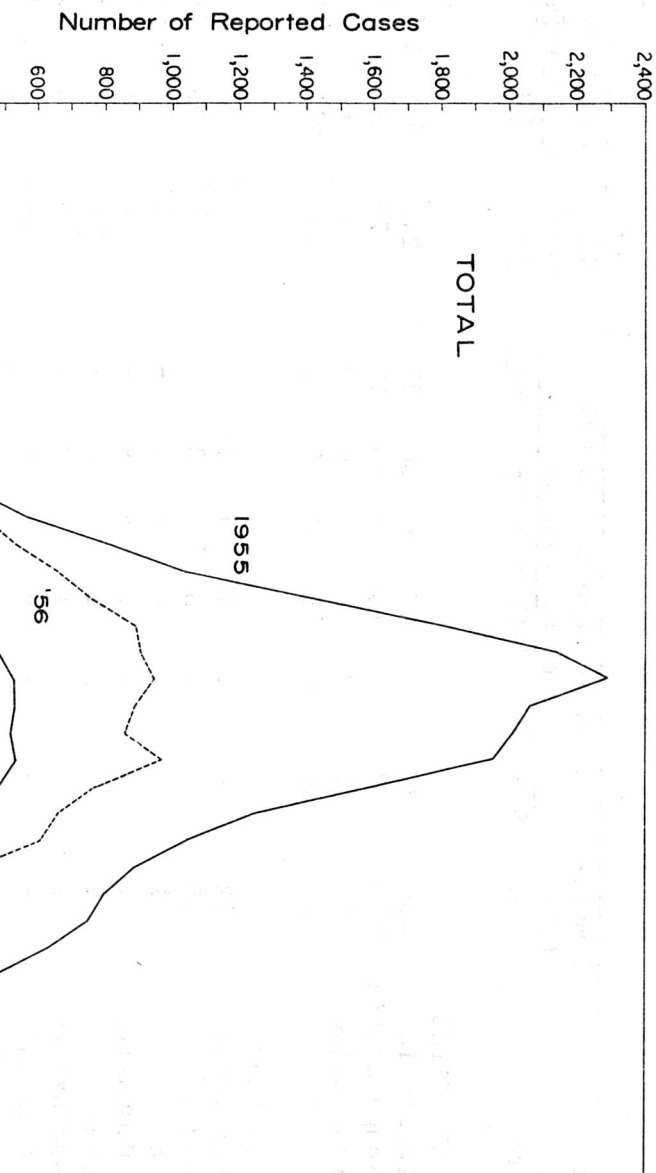


Table 1

TREND OF 1961 POLIOMYELITIS INCIDENCE

State and Region	Cumula- tive 1961	Cases Reported to CDC For Week Ending						Six Week Total	Comparable Six Weeks Totals in		
		8-5	8-12	8-19	8-26	9-2	9-9		1960	1959	1958
UNITED STATES											
Paralytic	454	27	36	48	58	36	37	242	591	1780	712
Nonparalytic	150	7	16	13	9	18	16	79	200	896	579
Unspecified	81	2	2	8	7	6	9	34	107	240	214
Total	685	36	54	69	74	60	62	355	898	2916	1505
NEW ENGLAND											
Paralytic	12	-	1	1	1	3	2	8	46	99	11
Total	15	-	1	3	1	3	3	11	65	150	36
Maine	1	-	-	-	-	1	-	1	13	6	-
New Hampshire	1	-	-	1	-	-	-	1	-	3	4
Vermont	2	-	-	1	-	-	-	1	3	1	1
Massachusetts	7	-	-	1	1	2	1	5	15	67	12
Rhode Island	-	-	-	-	-	-	-	-	20	1	1
Connecticut	4	-	1	-	-	-	2	3	14	72	18
MIDDLE ATLANTIC											
Paralytic	101	6	7	7	27	14	15	76	112	133	129
Total	134	6	7	12	33	25	23	106	144	248	229
New York	85	1	6	9	24	20	14	74	74	139	88
New Jersey	25	4	1	2	3	3	2	15	35	55	108
Pennsylvania	24	1	-	1	6	2	7	17	35	54	33
EAST NORTH CENTRAL											
Paralytic	41	-	3	2	8	6	3	22	105	193	212
Total	73	-	7	5	11	10	8	41	180	496	554
Ohio	19	-	1	-	4	1	-	6	44	111	92
Indiana	9	-	-	-	1	2	2	5	44	57	41
Illinois	19	-	3	2	2	1	2	10	61	118	71
Michigan	14	-	1	3	3	2	2	11	20	190	331
Wisconsin	12	-	2	-	1	4	2	9	11	20	19
WEST NORTH CENTRAL											
Paralytic	19	1	1	2	3	1	2	10	27	301	52
Total	41	2	3	4	3	5	4	21	51	592	109
Minnesota	5	-	-	-	1	-	1	2	16	92	8
Iowa	13	1	2	4	1	1	2	11	6	177	27
Missouri	10	-	-	-	-	2	-	2	6	173	42
North Dakota	1	-	1	-	-	-	-	1	7	5	21
South Dakota	1	-	-	-	-	-	1	1	1	9	1
Nebraska	4	1	-	-	1	-	-	2	8	48	2
Kansas	7	-	-	-	-	2	-	2	7	88	8

Table 1 (Continued)

[illegible]

